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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,191	08/21/2003	Andrew Thurkauf	58289 (72021)	1037
21874	7590	01/11/2006		
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER SAEED, KAMAL A	
			ART UNIT	PAPER NUMBER

1626

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,191

Applicant(s)

THURKAUF ET AL.

Examiner

Kamal A. Saeed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/20/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 36-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☒ Claim(s) 32-35 and 45-47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/21/03 & 4/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***DETAILED ACTION***

Claims 1-47 are pending in this application. Claims 36-44 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention. The withdrawn subject matter is patentably distinct from the elected subject matter as it differs in structure and element and would require separate search considerations. In addition, a reference, which anticipates one group, would not render obvious the other.

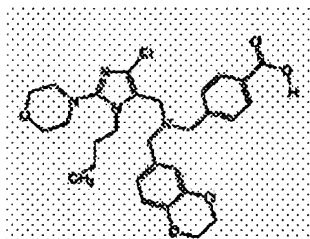
#### ***Information Disclosure Statement***

Applicant's Information Disclosure Statements, filed on 21 August 2003 and 19 April 2004 have been considered. Please refer to Applicant's copies of the 1449 submitted herewith.

#### ***Response to Restriction***

Applicants' election of Group I, claims 1-35 and 45-47 (all claims in part), drawn to the

compounds represented by formula (I), , and specific compound 15,



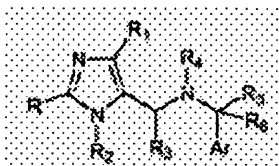
, provided in table 1, on page 64 of the specification in response filed on 20 October 2005 is acknowledged. Because Applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, the restriction requirement is deemed proper.

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In accordance with M.P.E.P. 821.04 and *In re Ochiai*, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims and method of use claims commensurate in scope with the allowed product claims will occur following a finding that the product claims are allowable. Until such time, a restriction between product claims and process is deemed proper.

***Scope of the Elected and Examined Subject Matter:***

The scope of the invention of the elected subject matter is as follows:



Compounds of formula I, , depicted in claim 1, wherein:

R represents:

heterocycloalkyl, which is optionally substituted;

R<sub>1</sub> represents:

(i) hydrogen, hydroxy, halogen, amino, cyano, nitro, C<sub>1</sub>-C<sub>2</sub>haloalkyl or C<sub>1</sub>-C<sub>2</sub> haloalkoxy;

(ii) C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>2</sub>-C<sub>4</sub>alkenyl, C<sub>1</sub>-C<sub>4</sub>alkoxy, C<sub>2</sub>-C<sub>7</sub>cycloalkyl, (C<sub>2</sub>-C<sub>7</sub>cycloalkyl)C<sub>1</sub>-C<sub>2</sub>alkyl, or mono- or di-C<sub>1</sub>-C<sub>4</sub>alkylamino R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>7</sub> alkyl or optionally substituted C<sub>2</sub>-C<sub>7</sub> alkenyl; or

(iii) phenylC<sub>0</sub>-C<sub>4</sub>carbonyl or (5- or 6-membered heteroaryl)C<sub>0</sub>-C<sub>4</sub>carbonyl, each of which is optionally substituted;

R<sub>3</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl;

R<sub>4</sub> represents:

(i) optionally substituted arylC<sub>0</sub>-C<sub>2</sub>alkyl having 1 ring or 2 fused rings; or

(ii) optionally substituted arylC<sub>1</sub>-C<sub>2</sub>alkyl, wherein the aryl portion is fused to a 5- to 7-membered saturated or partially unsaturated ring having 0, 1 or 2 ring atoms independently chosen from N, O and S, with remaining ring atoms being carbon;

R<sub>5</sub> and R<sub>6</sub> are independently chosen from hydrogen and C<sub>1</sub>-C<sub>4</sub>alkyl; and

Ar represents:

(i) optionally substituted aryl having 1 ring or 2 fused or pendant rings; or

(ii) optionally substituted phenyl fused to a 5- to 7-membered saturated or partially unsaturated ring having 0, 1 or 2 ring atoms independently chosen from N, O and S, with remaining ring atoms being carbon.

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As a result of the election and the corresponding scope of the invention identified supra, the remaining subject matter of claims 1-35 and 36-44 are withdrawn from further consideration pursuant to 37 CFR 1.142 (b) as being drawn to non-elected inventions. The withdrawn compounds contain varying functional groups such as triazine, homopiperazinyl, thiomorpholinyl, propylaminyl etc, which are chemically recognized to differ in structure and function. This recognized chemical diversity of the functional groups can be seen by the various classification of these functional groups in the U.S. classification system, i.e. class 544 subclass 63(+) (thiomorpholine), class 540 subclass 450(+) (homopiperziny), class 544 subclass 180(+) (triazines), 548 subclass 400(+) pyrrolidines etc. Therefore the subject matter which are withdrawn from consideration as being non-elected subject differ materially in structure and composition and have been restricted properly a reference which anticipated but the elected subject matter would not even render obvious the withdrawn subject matter and the fields of search are not co-extensive.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper time wise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent No. 6,884,815 B1, since the claims, if allowed, would improperly extend the “right to exclude” already granted in the patent. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to the same art recognized subject matter. A reference anticipating one set of claim will render the other obvious and it would have been obvious to one of ordinary skill in the art at the time of the invention was made since US Patent No. '815 teach the generic compound of the instantly claimed compound. The instant claims differ from the reference by reciting a specific species and a more limited genus than the reference. The instant compound is so closely related structurally to the analogous compound of the reference as to be structurally obvious therefore in the absence of any unobviousness or unexpected properties. One of ordinary skill in the art would be motivated to prepare the compound since there is an exemplary teaching to prepare the claimed compound in the prior art. The motivation to make the claimed compound derives from the expectation that structurally similar compounds are generally expected to have similar properties and have similar utilities. *In re Gyurik*, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979). Applicants should note that a generic teaching is grounds for obvious type double patenting rejection. In looking at the instantly claimed compound as a whole, the claimed compound and its uses would have been suggested to one skilled in the art unless unobvious or unexpected results can be shown.

### ***Objections***

Claims 1-35 and 45-47 are objected to for containing non-elected subject matter.

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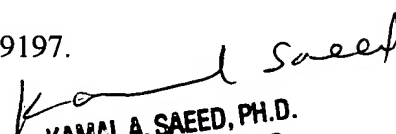
### ***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamal A Saeed whose telephone number is (571) 272-0705. The examiner can normally be reached on M-T 7:00 AM- 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

Communication via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or public PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

  
KAMAL A. SAEED, PH.D.  
PRIMARY EXAMINER